DOCUMENT RESUME

ED 444 266 EA 030 589

AUTHOR	Matsui, Bruce
TITLE	Action Mapping: A Planning Tool for Change. HSLA Monograph.
INSTITUTION	Pacific Resources for Education and Learning, Honolulu, HI.; Hawaii State Dept. of Education, Honolulu.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	1997-08-00
NOTE	25p.; This monograph is part of a series published quarterly by Hawaii School Leadership Academy, Hawaii State Department of Education. For others in the series, see EA 030 587, EA 030 590, and EA 030 591.
PUB TYPE	Books (010) -- Opinion Papers (120)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Action Research; *Educational Change; *Educational Environment; Elementary Secondary Education; *Organizational Development; Public Schools; *Systems Analysis; *Systems Approach

ABSTRACT

Future leaders will have to rely upon skills that are far different from those used in the past. Action mapping serves as a meta-process for moving schools toward desired ends; it calls upon school leaders to move into action, to reflect upon such actions, and to collect stories for future reflections. This process could be helpful to a school going through accreditation with the Western Association of Schools and Colleges (WASC). Action mapping could be used to consolidate a school's WASC self-study findings into a schoolwide action plan. This monograph challenges current planning processes, and posits instead a sense-making process that allows organizations to transform themselves in seemingly chaotic environments. Action mapping assumes that organizations value networks that support the flow of information throughout its system. In action mapping, those responsible for producing success share the responsibilities of developing wisdom for an entire organization. It presupposes that change requires support from the organizational hierarchy, and it strongly believes that each participant in a system has a capacity to contribute ideas that enhance and sustain the system. (Contains 16 references.) (DFR)

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ACTION MAPPING

A PLANNING TOOL FOR CHANGE

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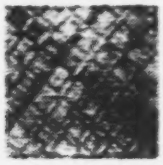
ACTION MAPPING

A PLANNING TOOL FOR CHANGE

August 1997

BRUCE I. MATSUI
The Claremont Graduate School



About the Author

Dr. Bruce I. Matsui is currently a professor at the Center for Educational Studies of the Claremont Graduate School. Prior to his current position, Dr. Matsui spent 17 years as an administrator in the Montebello Unified School District, served as the Director of the Los Angeles County School Leadership Center, and was the Deputy Superintendent of the Pasadena Unified School District.

His current interest involves large system educational reform and the attributes of leadership for the coming century. He is currently engaged in the assessment of the SB 1274 demonstration schools project in California and the LEARN project in Los Angeles. Much of the article draws upon his interests in the systems thinking that has evolved from the earlier works of systems analysis.

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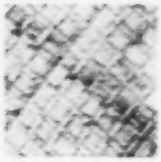


Foreword

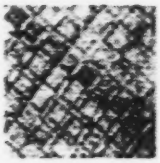
Why is it that we can so accurately predict the future achievements of students who share certain attributes such as ethnicity, socio-economic background, neighborhoods, and parental structures?

I have had a lifelong interest in first understanding the cause of such cycles of predictability and then discovering the means by which we can break such cycles. Recently, I have begun to use processes that call upon schools to make sense of their environments before adopting programs. Only by understanding the patterns of relationships in one's environment can we hope to influence the introduction of new ideas. Leaders in the new century will have to rely upon skills that are far different from those utilized in the past. Action mapping serves as a meta-process for moving schools toward desired ends. Action mapping calls upon school leaders to move into action, to reflect upon such actions, and to collect stories for future reflections.

This process could be helpful to a school going through accreditation with the Western Association of Schools and Colleges (WASC). Action mapping could be used to consolidate a school's WASC self-study findings into a schoolwide action plan. The development of a

schoolwide action plan is described in an earlier PREL monograph titled, "Focus on Learning."

ACTION MAPPING
A PLANNING TOOL FOR CHANGE



The purpose of this article is to: (1) put forward a position that challenges current planning processes, and (2) posit, instead, a sense-making process that allows organizations to transform themselves in seemingly chaotic environments.

Introduction

When researchers listen carefully to conversations about school change, they find that carefully constructed strategic plans are rarely utilized for the periods they purport to cover. Said differently, five-year plans rarely last five years. The majority of five-year plans are never put into action; they are simply set aside for amendments or abandoned completely (Stacey, 1992). Common flaws of such plans are caused by assumptions embedded in the legal-rational paradigm that has governed much of our thinking for the past century.

The Legal-Rational Paradigm

The father of modern-day legal-rational theorists, Max Weber, believed that goals were best met by meritocratic organizations. In Weber's legal-rational theory, organizations work best when orchestrated by informed leaders at the top. In Weber's model, an organization with meritocratic practices continually promotes its brightest and most productive workers to the top, thereby ensuring

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enlightened decisions that benefit the entire work-place. Weber believed that the best and brightest deservedly held the power to hold the lower-archy accountable. For the better part of this century, these beliefs have created a myth that a well-organized chain of command could and should control the productivity of workers throughout an entire work-place. Stacey (1992) observed:

> Underlying today's mental models is the unquestioned assumption that observed effects can be directly linked to causes in a straightforward, linear fashion - that our actions and their outcomes can be, in principle at least, unequivocally connected to each other. (pp. 41-42)

Earlier, Barnard (1938) questioned the validity of this assumption, as follows:

> If a directive communication is accepted by one to whom it is addressed, its authority for him is confirmed or established. It is admitted as the basis of action. Disobedience of such a communication is a denial of its authority for him. Therefore, under this definition the decision as to whether an order has authority or not lies with the persons to whom it is addressed, and does not reside in 'persons of authority' or those who issue orders. In the final analysis the authority fails because the individuals in sufficient numbers regard the burden involved in accepting necessary order as changing the balance of advantage against their interest, and they withdraw or withhold the indispensable contributions. (pp. 163-65)

Weick (1969, 1979), among others, began to observe that the legal-rational view was increasingly difficult to support. In describing the daily life of an organization, Weick (1969) wrote:

> Organizations deal with streams of materials, people, money, time, solutions, problems and choices. Streams can be a useful metaphor to

> portray the continuous flux associated with organizations, but there are some subtleties in this image. A stream might be visualized as a single homogeneous viscuous flow that moves at a constant rate. Such a visualization is unduly limiting as a portrait of organizational processes, and a more appropriate image would be that of multiple, heterogeneous flows of diverse viscosity moving at variable rates. If you can visualize something moving between two points, and then visualize the points also moving, that's what flows in organizations are like. (p.42)

Because complex workplaces are more difficult to direct, organizations controlled from the "top" expend an enormous amount of their resources developing plans that are layered with controlling mechanisms (Argyris, 1990; Senge, 1990; Fullan, 1993; Stacey, 1992). As legal-rational organizations attempt to monitor and control the workplace, their plans are mired in layers of incentives, timelines with targeted dates, specific goals accompanied by prescriptive objectives, and policies that govern what one does or does not do. Such organizations come to perceive themselves as controllable entities, consisting of parts that, when meshed together, function in predictable ways. Unlike the metaphor of a moving stream, legal-rational organizations commonly believe themselves to be finely-tuned machines. The policies and guidelines of these mechanized workplaces emphasize the need for carefully sequenced, logical actions.

Legal-rational thinking is a by-product of a Newtonian perspective. A person with a Newtonian outlook believes that events are controlled by practices based on carefully constructed, logical plans. In contrast, systems thinkers view these practices as "iffy" at best, for such beliefs ignore the chaotic and unpredictable nature of the real world.

Systems Thinking

Fritjof Capra, the quantum physicist and author of *The Tao of Physics (1988)*, Margaret Wheatley, the author of *Leadership and the New Science (1992)*, Peter Senge, the author of *The Fifth Discipline*, and semeiticians A. S. Lamb and J. Regan (1982) have begun to incorporate principles from quantum physics into their perceptions of organizations. Unlike the Newtonian perspective, systems thinkers view the universe as a whole, not as an assembly of controllable parts. These authors challenge the legal-rational belief that workplaces can be leveraged, tamed, and controlled from the top. Where legal-rational authors seek logical building blocks for predictable environments, systems thinkers believe that future environments are unpredictable and ambiguous. In the legal-rational world, creating rules and regulations, monitoring workloads, and assessing each piece of the organization separately are essential. In the emerging systems perspective, the whole system is greater than the sum of its parts. In systems thinking, change is highly dependent on ways that the entire system introduces, engages, and inducts information.

In systems thinking, the real world is ambiguous, filled with paradoxes of chaos and order, growth and decline, and predictability and unpredictability. For organizations that attempt to create plans based on predictable events, the reality of their worlds remain utterly unpredictable. An unpredictable world makes many of the beliefs of the legal-rational theorists untenable. As Stacey (1992) states:

> The great importance of the discoveries about nonlinear feedback systems - that is, about chaos and self-organization - is that they make the whole worldview (Newtonian) completely untenable. We

> now know that most of nature's systems are nonlinear feedback ones that function in many respects in a chaotic, and therefore unpredictable, continuously creative manner that makes simple ideas of controlling them impractical. (p.124)

This article argues that organizations utilizing planning mechanisms that provide nonlinear feedback work better than organizations that carefully craft strategic plans that assume predictable futures. The remainder of this article introduces the reader to an alternative form of planning called *action mapping* that asks organizations to link key components of change into an integrated circuit that produces deep and lasting changes.

Action Mapping

Action mapping assumes that organizations value networks that support the flow of information throughout its system. In action mapping, those responsible for producing success share the responsibilities of developing wisdom for an entire organization. Action mapping believes that change requires support from the organizational hierarchy. In action mapping, work, or action taken, is "the" essential indicator of success. The quality of one's work represents the re-formation of a system. Without the engagement of each member of the community, change remains an illusion. Action mapping strongly believes that each participant in a system has a capacity to contribute ideas that enhance and sustain the system.

As a workplace employs action mapping, its system moves away from a paradigm of control and dominance to one of commitment and relationships. Action mapping builds on planning strategies that challenge earlier methods associated with legal-rational thinking.

More than a decade earlier, Elmore (1983) and Odden and Odden (1984) outlined an alternative planning process that they called *backward mapping*. Action mapping builds upon the process of backward mapping by beginning with the formal gathering of key stakeholders. Action mapping goes on to advocate a position that individuals charged with the implementation of change must be allowed to use an assortment of pathways (action hypothesis) to get to the organization's goals. In action mapping, the organization begins with a clear understanding of the desired change and encourages individuals to utilize *their* strengths.

In action mapping, leaders must be: 1) supportive of local planning processes, 2) willing to assist the change process with their expertise, and 3) willing to provide the necessary time and funds. Leaders of action mapping are guided by the following questions:

- Who is responsible for delivering the change?
- What resources are currently available?
- What obstacles have to be overcome?
- What are possible solutions and where are they located?
- How can the learning history of the organization help us?
- What will we keep, fix, stop, and start as we begin our journey?
- How will we keep track of the journey?
- How will we tell stories about what we have learned?

The action map is based on the collective wisdom of the assemblage of people who will be affected by the proposed change. Information is critical to the creation of a map. The action map is highly dependent on a network of relationships

within the workplace that serves to carry the flow of information to its membership. In the end, the success of the process depends on actions taken and reflected upon by the individuals in an assemblage.

Applying the Process to Organizations

What, for what, and so what? What will we do? Where are we doing it? And, how will it help us? These are all questions that surface at the beginning of a change process.

Action mapping responds to these questions by serving as a sense-making tool that links the past, present, and future. It starts with the cumulative knowledge and abilities of all members, and culminates in a hypothesized set of actions, on which the members of the assemblage reflect.

Action mapping rests upon the following assumptions:

1. Managing change is unpredictable and non-rational.
   In California, carefully crafted goals and objectives for the 1996 - 1997 school year were set aside by an unanticipated decision to reduce the size of classes in the primary grades. Resources that were originally linked to the well-planned agenda of the previous spring were suddenly diverted to meet the demands of the new and unanticipated mandate to reduce class size. Elementary schools were faced with the task of having to make sense out of an unpredicted development. Their previous plans were casualties of an unpredictable and non-rational world.
2. Change results from the induction of selected information.
   Wheatley (1994) states that information *informs*

and *forms* an organization. Selected information changes the organizational landscape. The decision to reduce class size was caused by the selection of information that identified class size as a critical variable for the improvement of education. Weick (1979) observed that the ecology of an organization's environment is enacted by actors (members of an organization). In this case, the induction of selected information resulted in a directional change for elementary schools.

3. Change and maintenance require energy from the same sources.
   Maintaining stability requires the use of the same pool of resources. Introducing change while maintaining stability can exceed an organization's reserves of energy. There is such a thing as too much complexity. Take, for example, your household; to maintain stability, you must expend energies. Repairs, upkeep, and bills are all examples of maintenance costs. Remodeling and expanding your house and landscaping your backyard are examples of new projects that require new energies. Bankruptcy can result from simultaneously trying to expand and maintain one's household.
4. Organizational workplaces cannot survive without psychic energies that fuel learning.
   Psychic energy is evidenced by a commitment to action. When systems rapidly lose psychic energy, they begin to shut down and conserve what remains. A "Back to Basics" philosophy is symptomatic of an organization's attempt to save resources. As one's sense of efficacy is depleted, it becomes difficult to continue what is being asked of the system. The loss of efficacy reflects a depletion of psychic energy.

A conscious belief that one's work will yield positive results is an absolute necessity in the field of education.

5. Processes are needed to guide groups while they are engaged in the selection of critical information that will affect eventual outcomes.
   Decisions that introduce change must be sheltered and supported with sufficient sources of energy. To successfully introduce change, organizations must develop ways of conserving energy.
6. Clarity and meaning are post-scriptive not prescriptive.
   Reflecting on action provides clarity, and clarity promotes a greater sense of efficacy. Making sense is always done in conjunction with something that has taken place. One can never be sure of something until some action has taken place (Weick, 1969).
7. Leadership's new roles in an environment of unpredictability include: 1) the "art" of getting people to pay attention, 2) the ability to manage energy resources, and 3) the mastery of processes that reduce the uncertainty surrounding change.
   The greatest ideas are useless unless people are afforded the time and energy to pay attention to them.

Action mapping provides organizations with a process that integrates six critical components that are essential for transformational change. Each component serves as a nexus on a transformational circuit board. Linking each component reduces the amount of uncertainty in the environment and produces efficacious actions. The reduction of uncertainty will provide members of a workplace with increased levels of psychic energy, clarity, and wisdom.

The Components of Action Mapping

Action maps require the integration of the following components: 1) Assemblage, 2) Accumulation and Production of Wisdom, 3) Actions as Hypothesis, 4) Conservation of Energy, 5) Reflection on Action, and 6) Storytelling. Each component is now described.

I. Assemblage

Webster's dictionary defines *as-sem-blage* as: 1.a. The act of assembling; b. The state of being assembled. 2. A collection of people, a gathering. 3. A fitting together of parts.

In this component, an organization acts to gather everyone affected by the change, especially those who are expected to deliver the product. An assemblage is an intentionally inclusive community. The relationships formed within such an assemblage act as a conduit of new information. The nurturing of strengths and diversities through open processes is a non-negotiable function of an inclusive assemblage. An assemblage that continually eliminates diverse viewpoints will grow weaker because the strengths of its membership will never be fully realized.

II. Accumulation and Production of Wisdom

An assemblage, when viewed as a dynamic and enlightened entity, is enormously capable of producing desired changes. Each assemblage's potential includes collective acquired wisdom. Each also has an enormous potential to produce greater wisdom. Before attempting to introduce change, a wise assemblage determines the depth of its accumulated wisdom. If the members discover that their wells of wisdom are not deep enough, the assemblage employs strategies to dig deeper or new wells to

augment its reservoir of wisdom.

Organizational wisdom is sustained in three forms.

1. Information is internalized through formal learning such as: a) articles and videotapes, b) formal education, and c) attendance at lectures and workshops.
2. Information is gained through experiences.
3. Expertise is acquired in the use of tools and strategies.

Once determined, the collected wisdom is clarified, categorized, archived, and distributed as a valuable organizational resource.

As a result of determining the accumulated levels of wisdom, the assemblage may take actions to augment its current level of knowledge. It can do so by attending workshops, calling on outside experts, engaging in professional readings, hiring experts in the use of certain tools, and hiring coaches in the use of interesting strategies. The ability to produce wisdom is the primary benchmark of a learning community. Accumulation and production of wisdom may also serve to control an organization's journey toward its desired destinations.

III. Actions as Hypothesis

In an inclusive assemblage, everyone does not have to travel the same route. In fact, getting "there" is strengthened by non-routine pathways (Stacey, 1993), and weakened by the insistence on "a" particular way (Rosenholtz ,1991). Members of the assemblage are capable of traversing the unknown in a multitude of ways because they have a great deal of expertise, comfort, and confidence in certain ways of traveling. The more inclusive the number of paths, tools, and strategies are, the greater the

likelihood that the organization will reach its destinations. This is *not* to say that members should not be introduced to new methods of traveling; it is to say that new methods are best introduced in an inclusive environment.

For example, improving literacy skills among all students is *not* about choosing among whole language, sight vocabulary, and phonics. Teachers with the capacity to employ multiple methods possess greater potential for success in reaching a diverse population of students. They have the capacity to teach inclusively and non-routinely, not exclusively and routinely. Weick (1979) states, "...common ends require diversified means."

Each member of the assemblage has an opportunity to engage in "actions as hypothesis." Members can travel alone, in pairs or in teams. "Actions as hypothesis" provides an unequivocal sense of purpose for each member of the assemblage. Only after taking action can one hope to make meaning of a journey. Clarity and wisdom come as a result of action. Waiting for the perfect plan to emerge does not add to the wisdom of an organization.

IV. Conservation of Energy

As mentioned earlier, the maintenance of stability and the simultaneous introduction of change expends enormous amounts of energy. The reality of a system that tries to maintain stability and also introduce change is marked by a rapid depletion of its resources. "Back to Basics" is an expression of an organization's desperate attempt to conserve energy, and can be understood as a system's response to conserve resources by rejecting change. Consequently, if change is to be successfully introduced, it will have to be done at the expense of some current practices.

If an organization wishes to overcome stability, the system must honestly anticipate the requirements of change and create processes to conserve its energy. Systems cannot expect to survive "the new" while maintaining "the old."

KEEP…..FIX…..STOP…..before…..STARTING is a process that serves to conserve an organization's reserves. KEEPING what works is not only prudent, it recognizes the historical efforts of an assemblage. FIXING or adjusting existing practices or tools can save a great deal of energy and resources. STOPPING practices and eliminating tools and strategies that no longer work are *non-negotiable* processes. STARTS are only to be engaged when an assemblage has assured itself of sufficient provisions for the journey.

V. Reflection on Action

Captains of seafaring ships are required to keep a log of activities during a voyage. Good logs describe daily activities and relationships among the members of the crew and passengers. Logs also account for daily expenditures of provisions. Determining whether decisions taken during the voyage were wise and worthwhile occur *after* decisions are enacted, not before. The members of the ill-fated spy vessel, *Pueblo*, were judged unfairly on the basis of an ill-constructed plan of action that had nothing to do with the actual circumstances of the *Pueblo's* capture (Saul, 1993). The Navy would have benefited by studying the logs and recollections of the crew of the *Pueblo*, rather than seeking to determine if the crew had followed an inappropriately contrived plan. Good logs deepen the shipowner's ability to gain preciseness and wisdom for future trips.

Reflections inform members of an organization

about the daily activities of the workplace. They tell the organization about effective relationships and they continuously inform the organization about the effectiveness of its actions. The act of reflecting provides much-needed feedback for a system. By keeping good logs, a system gains wisdom. Organizations that travel well recognize the importance of reflecting and build it into their practices as an integral part of their culture.

IV. Storytelling

Storytelling is an indispensable form of interpretation that shapes events within learning communities. As an historical compilation, members of an assemblage are asked to share interpretations of their journeys through stories. Stories can be told in a variety of modes that include visual accounts, ballads, metaphors, text, and voice. Telling good stories serves the organization with an effective means of collecting wisdom through experience. Storytelling serves as a primary means of gathering wisdom on a continuous basis.

The knowledge and experiences gained from a journey clarify future actions by identifying emerging patterns. Recognizing patterns in one's environment enables schools and organizations to travel with greater precision and added wisdom. Storytelling informs and forms the membership's understanding of its organization. In action mapping, storytelling serves as evaluation.

Conclusion

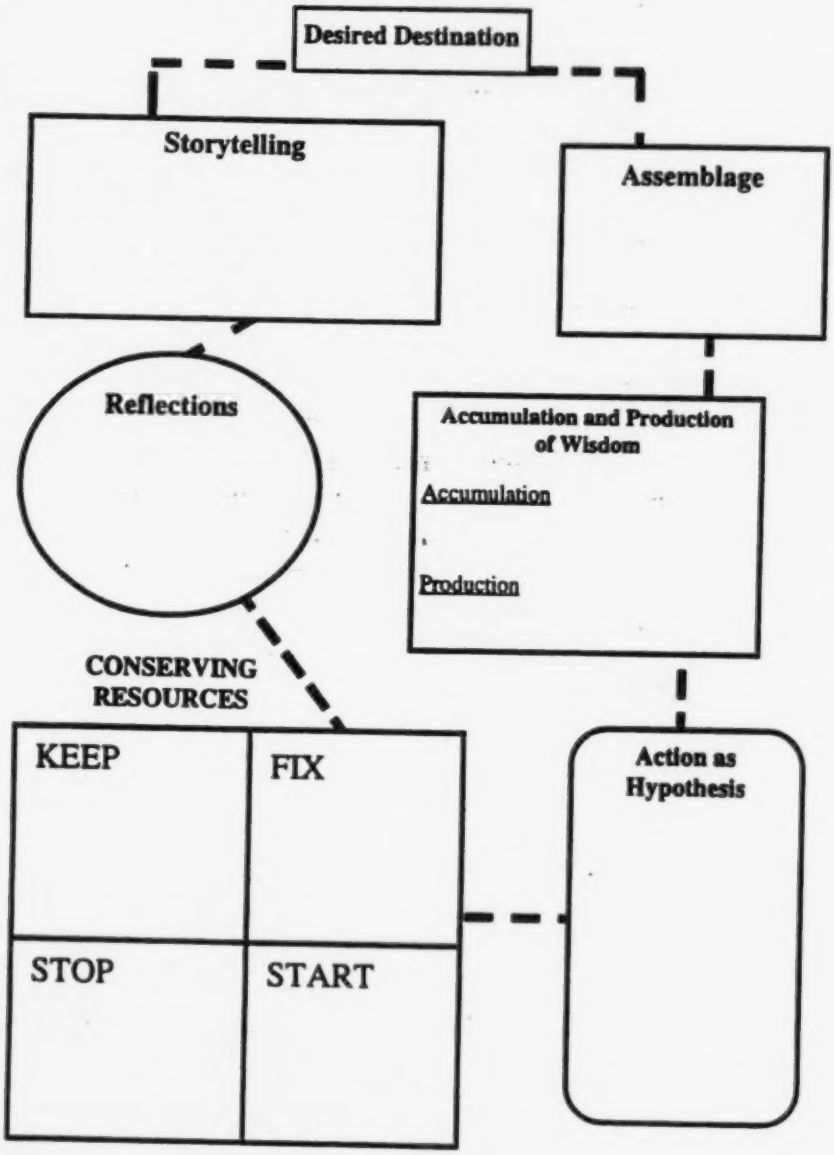
Lately, much has been written about the need for *communities of learning* (Senge, 1992; Sergiovanni, 1992; Stacey, 1992). However, little has changed in the way that most educational organizations plan for their futures. This article argues against many of today's planning strategies in

favor of an action-based process that relies on the integration of key components of change. The goal of a learning community is best evidenced by the establishment of a continuous process of acquiring wisdom — wisdom gained through the recognition of information gained from actions. This form of wisdom continually expands personal understandings of the universe. The expansion of personal universes lies at the heart of our existence. How and what is learned provides information that informs and forms one's world. The relationships engendered serve to nurture a system's ability to access information. Organizations become wiser from information shared through their relationships.

Planning is not a prescriptive process for a predictable environment. Planning should be viewed as a sense-making activity that gathers knowledge about what has happened and what is happening. Planning should be viewed as a map-making activity that discovers pathways within emerging patterns and circumstances. Cartography, the art of making maps, looks back at voyages taken in the past and then serves up guides for journeys into the future.

It is hoped that action mapping will serve the reader as a tool for linking the known to the unknown. The best planning, like the best maps, offers many paths, not "a" path. Action mapping, at its best, tries to incorporate: 1) an analysis of the past and present, 2) a hypothetical means of journeying to the future, and 3) a process for reflecting on one's actions. Within action maps there are continuous feedback opportunities. These non-linear feedback opportunities allow assemblages the chance to adjust to real conditions.

Action Map



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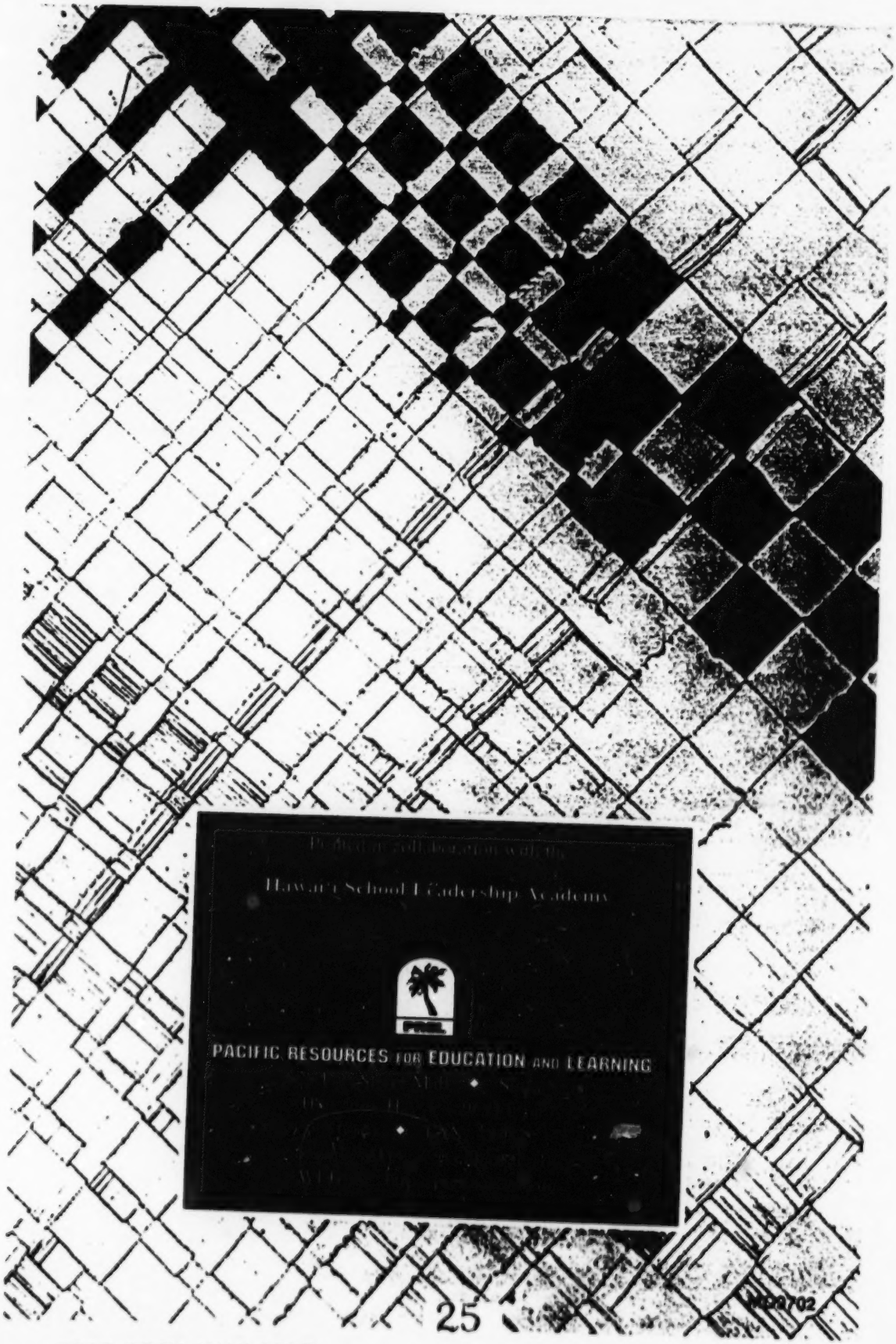

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